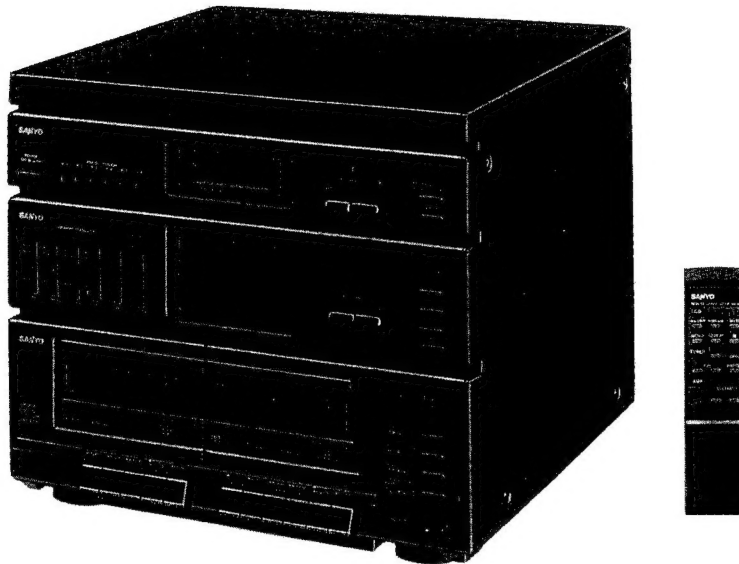




## Service Manual

## Stereo Sound System

## DCX49 (GENERAL)



### Specifications

Tuner section		General
Frequency range . .	FM: 87.5 — 108 MHz MW: 531 — 1602 kHz (9 kHz steps) 530 — 1700 kHz (10 kHz steps)	Output power . . . 200 W (Total P.M.P.O.) Inputs . . . . . CD: 47 k ohms (250 mV) Outputs . . . . . SPEAKERS: 8 ohms HEADPHONE: 8 ohms
Cassette deck section		Power
Recording system .	AC bias, 4-track stereo	requirements . . . AC: 110 — 127/ 200 — 220/ 230 — 250 V 50 Hz/60 Hz
Rewind and fast forward time. . . .	Approx. 115 sec. (C-60)	
Wow and flutter . .	0.2% (WRMS)	Dimensions (W x D x H) . . . . Approx. 360 x 370 307 mm

Specifications subject to change without notice.

PRODUCT CODE No.  
129 318 03

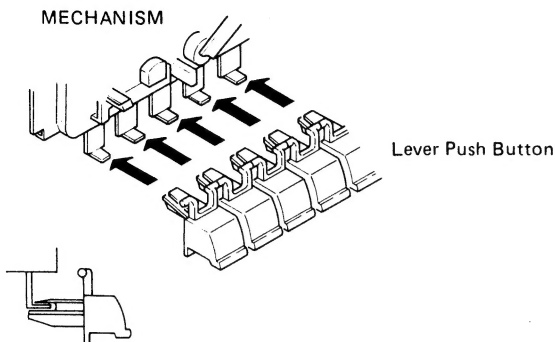
### RB 49 REMOTE CONTROLLER

Power
requirements . . . DC: 3V, "AA/SUM-3/ R6" battery x 2
Dimensions
(W x D x H) . . . . Approx. 160 x 40 x 18 mm

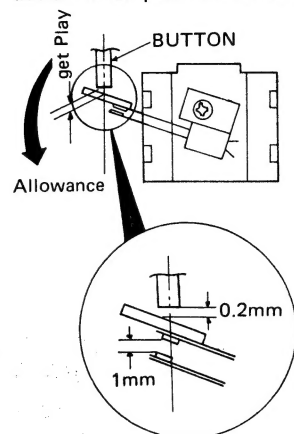
REFERENCE No. WM-580318

## HOW TO ASSEMBLE THE SET

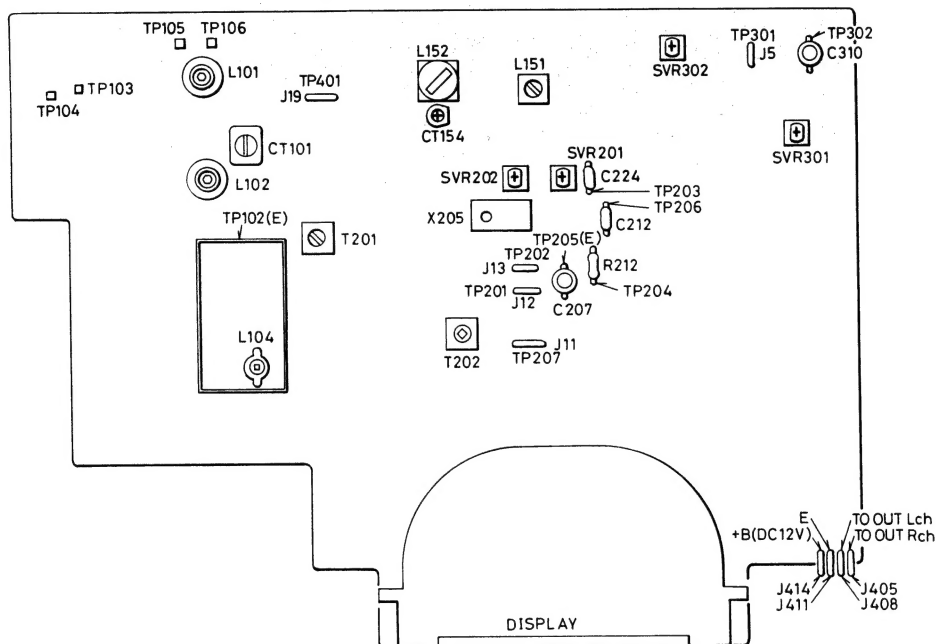
### • Mechanism



**CHECK NOTICE:** Please install a Leaf SW as this follow.  
Because to have space untill switch action when push the button.



## PARTS LOCATION (TUNER SECTION)



## ADJUSTMENTS

**NOTE:** 1. Power source voltage is DC 12V.

2. Use a screw driver with plastic grip for all adjustment.
3. Signal input must be kept as low as possible to avoid overload.

4. Use an output meter of the highest possible sensitivity.
5. Adjust the intermediate frequency of AM and FM to the frequency of ceramic filter.

## ADJUSTMENTS

### (1) FM Band

Antenna: 75 ohm open SG direct, standard modulation frequency: 1kHz, Deviation: 75 kHz (Mono)

ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUST-ING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
IF	V-curve	98.0 MHz	FM sweep generator (10.7 MHz non modulation)	TP103 (H) TP104 (E)	FM sweep generator	TP203 (H) TP205 (E)	T201	Max.
	S-curve					TP204 (H) TP205 (E)	T202	Symmetrical Wave Max.
Tuning Coverage	Low	87.5 MHz	—	—	Digital Voltmeter	TP401 (H) TP102 (E)	—	—
	High	108.0 MHz					L104	$8.0 \pm 0.05V$
Tracking	Low	90.0 MHz	FM-SG (10dB)	TP103 (H) TP104 (E)	VTVM Oscilloscope	Tuner out (L or R)	L101 L102	Max.
	High	106.0 MHz					CT101	
IF S-curve (Distortion factor)		98.0 MHz	FM-SG (66dB)	TP103 (H) TP104 (E)	Digital Voltmeter	TP201 (H) TP202 (E)	T202	$0 \pm 0.05V$
S.D. (Station Detector)		98.0 MHz	FM-SG (22dB)	TP103 (H) TP104 (E)	Digital Voltmeter	TP207 (H) TP205 (E)	SVR201	Less than 4V
VCO (19 kHz)		98.0 MHz	FM-SG (66 dB)	—	Counter	TP301 (H) TP302 (E)	SVR302	$19kHz \pm 50Hz$
Separation		98.0 MHz	FM-SG (66dB) Stereo Modulator*	TP103 (H) TP104 (E)	VTVM Oscilloscope	Tuner out (L or R)	SVR301	L/R-ratio Max.

\* Stereo modulator: Deviation Main (L + R) ...  $\pm 40$  kHz  
Pilot (19kHz) ... 6.75 kHz

### (2) MW Band

MW step switch to select "10K" position. (GENERAL only) Antenna: IRE Loop antenna, Standard modulation: 1 kHz 30%

ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUST-ING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
IF		1000 kHz	AM Sweep generator (450 kHz non modulation)	TP105 (H) TP106 (E)	AM sweep generator	TP206 (H) TP205 (E)	(X205)	NOT ADJUST ONLY CHECK
Tuning Coverage	Low	530 kHz	—	—	Digital Voltmeter	TP401 (H) TP102 (E)	—	$1.2 \sim 1.3 V$
	High	1700 kHz					L151	$8.0 \pm 0.05V$
Tracking	Low	600 kHz	AM-SG (75 dB)	Loop ANT.	VTVM Oscilloscope	Tuner out (L or R)	L152	Max.
	High	1400 kHz					CT151	
S.D. (Station Detector)		1000 kHz	AM-SG (85 dB)	Loop ANT.	Digital Voltmeter	TP207 (H) TP205 (E)	SVR202	Less than 4V

## ADJUSTMENT OF DECK & TORQUE

Amplifier Adjustment

	Item	Deck	Test Tape	Input	DOLBY SW.	Output	ADJUST POINT	Remarks
1	Head Azimuth	TAPE A TAPE B	VTT738	—	OFF	TAPE OUT	AZIMUTH SCREW	Adjustment to obtain maximum, right and left balanced output.
2	Playback Level	TAPE A	TCC-130 200nW/m	—	OFF	TAPE OUT	SVR502 SVR602	Adjust to obtain 540mV on VTVM.
		TAPE B					SVR501 SVR601	
3	Rec/Play Level	TAPE B	AC-224	1kHz -8 dB	OFF	TAPE OUT	SVR503 SVR603	Adjust to obtain 56mV on VTVM.
4	Rec/Play Frequency	TAPE B	AC-224	1kHz/10kHz -2.8 dB	ON	TAPE OUT	SVR504 SVR604	Adjust to obtain same output of 1kHz and 10kHz.

Note : Input : CD IN terminal

## ADJUSTMENT OF DECK & TORQUE

### Tape Speed Adjustments

Step	Speed	Deck	Test Tape	SVR	Tape Counter
1	Normal	TAPE A	MTT-111 (3000Hz)	SVR001	3000 $\pm$ 5Hz
2	High	TAPE A	TCW-211 (1500Hz)	—	3000 $\pm$ 10%

1. Set the test tape (MTT-111) to "TAPE A" deck.
2. Adjustment to obtain the tape speed counter at Play of step 1.
3. High speed adjustment should be made after normal speed adjustment.
4. Set the TAPE B mechanism is record made with C-60 Blank cassette tape.
5. Adjustment should be made at the ending portion of the tape.
6. Set the Dubbing speed "HIGH".
7. Set the test tape (TCW-211) to "TAPE A" deck.
8. Confirm the indication of the tape speed counter within 2 second after push the PLAY(TAPE A) and REC.(TAPE B) button.

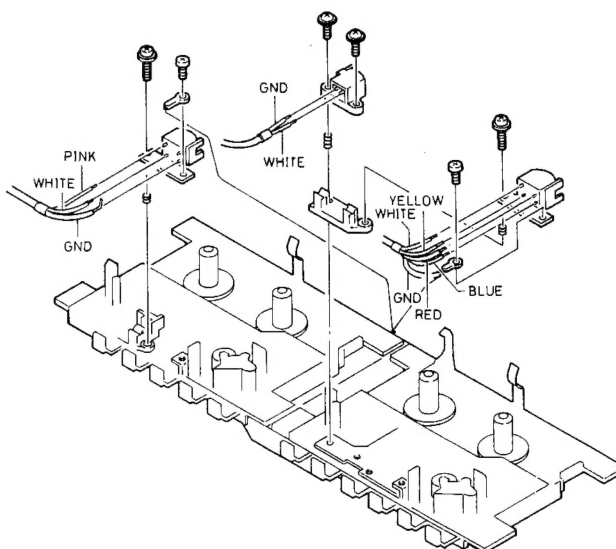
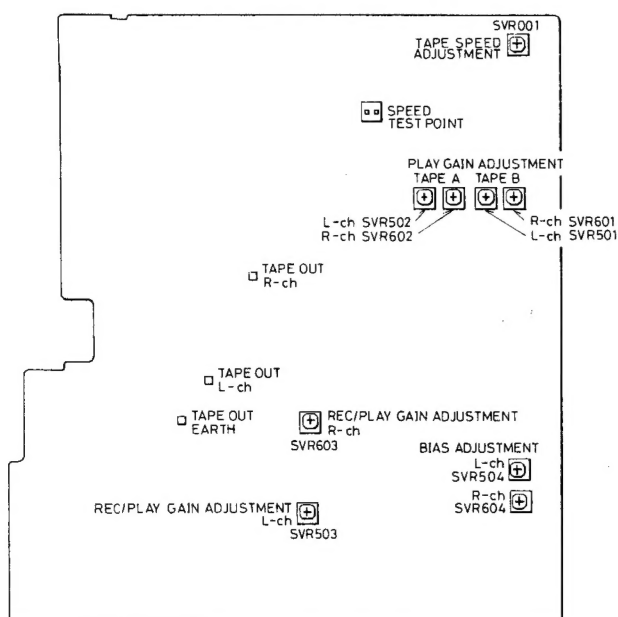
### Torque Measurements

Note: Prior to measurement, clean the head, capstan and pinch roller.

Item	Take-up torque	Back tension	Pulley tension
Test cassette	PLAY: TW-2111 F.FWD/REW: TW-2231	PLAY/F.F: TW-2111 REW: Torque Gauge	Driving power cassette: TW-2412
PLAY	30 ~ 60 gr. cm	2 ~ 4.5 gr. cm	>60g
F. FWD	55 ~ 120 gr. cm	—	
REW	55 ~ 120 gr. cm	—	

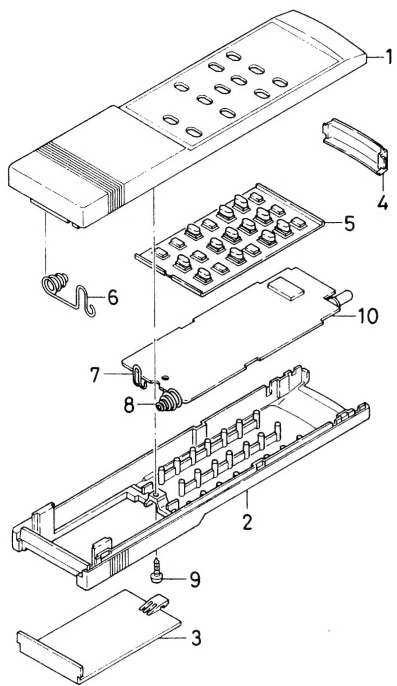
## PARTS LOCATION (DECK AMP SECTION)

## REPLACEMENT OF HEAD



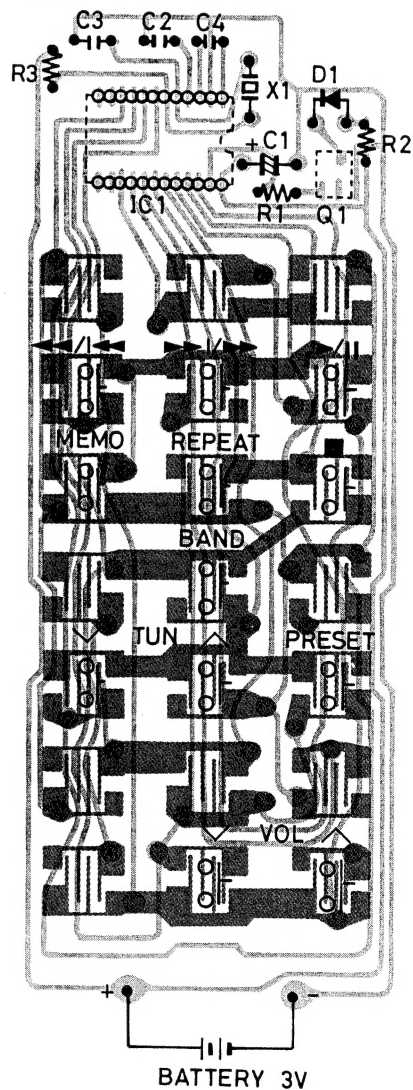
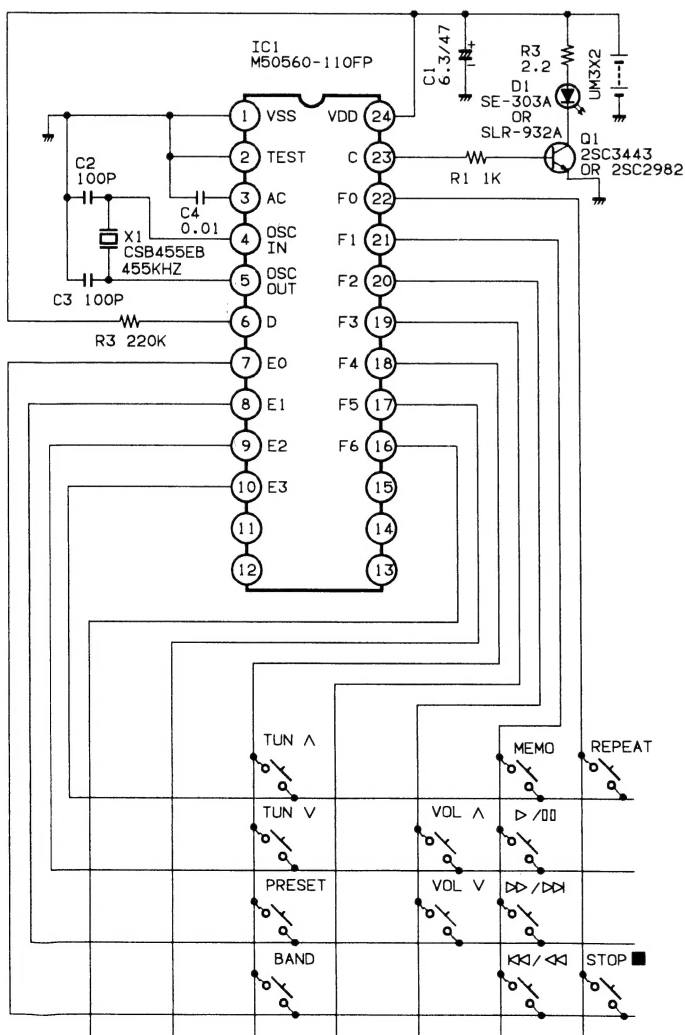


EXPLODED VIEW & PARTS LIST (REMOTE CONTROLLER... RB49)

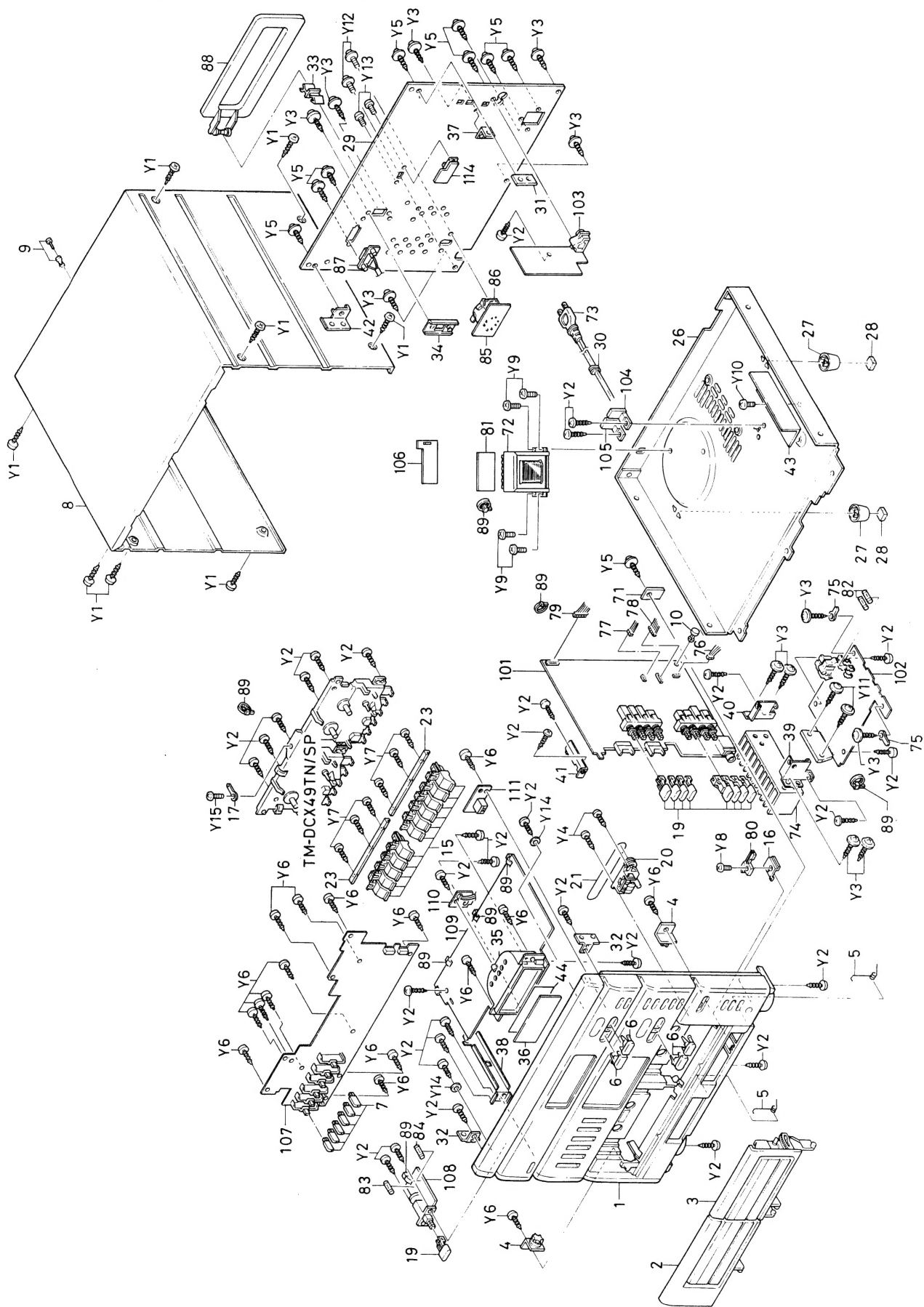


Ref. No.	Part No.	Description
1	614 213 0049	TOP LID ASSY
2	614 203 2602	BOTTOM LID
3	614 203 2619	BATTERY LID
4	614 203 2626	SIGN WINDOW
5	614 213 0100	PUSH BUTTON
6	614 203 2664	TERMINAL
7	614 203 2671	SPRING COIL
8	614 203 2688	SPRING COIL
9	411 100 0102	SCR S-TPG BIN 2X6
10	614 213 0223	P.C BOARD ASSY
X1	614 199 8435	CERAMIC RESONATOR KBR455BTL
IC1	409 121 0201	IC M50560-110FP
Q1	406 006 7300	TR 28C 3443BF
or	406 006 7409	TR 2SC3443BG
or	406 006 7508	TR 2SC2982B
or	406 006 7607	TR 2SC2982C
D1	408 004 0604	LED SE303A
or	408 004 0703	LED SLR-932A
C1	403 107 4306	ELECT 47U M 63V
C2	403 009 5817	CAPACITOR 100P K 50V
C3	403 009 5817	CAPACITOR 100P K 50V
C4	403 010 3007	CAPACITOR 0.01U 50V
R1	401 037 5400	MT-GLAZE 100 JA 1/10W
R2	401 150 5400	MTGLAZE 2.2 ZA 1/8W
R3	401 038 0909	MTGLAZE 220K JA 1/10W

SCHEMATIC & WIRING DIAGRAM (REMOTE CONTROLLER... RB49)



EXPLODED VIEW (CABINET & CHASSIS)



## PARTS LIST

### PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol  $\Delta$  in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with  $\Delta$ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.

Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

### PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 213 9592	INNER CARTON
	614 208 7855	PAD, TOP
	614 207 8198	PAD, BOTTOM
	614 176 3569	INNER POLYE COVER, SET
	614 213 9677	INSTRUCTION MANUAL
	614 036 6358	SOCKET, 3P, FOR CD
	614 016 4541	PLUG ASSY

### CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 214 0628	ASSY, PANEL, FRONT
2	614 211 3769	ASSY, LID, CASSETTE, TAPE A
3	614 211 3783	ASSY, LID, CASSETTE, TAPE B
4	614 069 0385	GEAR ASSY
5	614 151 7254	SPRING COIL, LID OPEN
6	614 207 3001	BUTTON
7	614 207 2349	KNOB, SLIDE, GEQ
8	614 207 2899	CABINET
9	614 129 4865	FIXER
10	614 129 4667	FIXER, DECK PCB BUSH
15	614 207 2370	BUTTON, MECHANISM
16	614 120 9050	BRACKET SWITCH, LEAF
17	614 051 9785	LUG, MECHANISM GND.
19	614 207 2356	BUTTON, POWER/FUNCTION ETC
20	614 207 7986	COUNTER
21	614 207 2509	BELT, SQUARE, COUNTER
23	614 194 9239	BRACKET, MECHANISM BUTTON
26	614 215 5370	CABINET, BOTTOM
27	614 207 2387	FOOT
28	614 106 4215	STAND
29	614 213 6362	PANEL, REAR
30	614 129 1710	FIXER
31	614 207 2455	SUPPORT, REAR SIDE DECK
32	614 207 2394	BRACKET-E, CABINET
33	614 108 0307	BRACKET, ANT
34	614 113 9678	BRACKET, ANT
35	614 117 9988	REFLECTOR, LCD
36	614 084 9790	SIGN WINDOW, LCD
37	614 207 3032	BRACKET-E, OUTPUT PCB
38	614 207 3025	BRACKET-E, TUNER PCB
39	614 207 3490	BRACKET-E, HEAT SINK LEFT
40	614 207 3506	BRACKET-E, HEAT SINK RIGHT
41	614 207 3049	BRACKET-E, DECK PCB
42	614 208 7657	SUPPORT, REAR SIDE DECK
43	614 212 1528	SHIELD
44	614 212 1535	SHEET
45	614 125 6566	CUSHION 10X30X6T

### FIXING PARTS

Ref. No.	Part No.	Description
Y1	411 021 6603	SCR S-TPG BIN 3X8
Y2	411 021 6405	SCR S-TPG BIN 3X8
Y3	411 020 9902	SCR S-TPG BRZ + FLG 3X8
Y4	411 021 1806	SCR S-TPG BIN 2.6X10

Ref. No.	Part No.	Description
Y5	411 020 8905	SCR S-TPG BRZ + FLG 3X10
Y6	411 021 3503	SCR S-TPG BIN 3X10
Y7	411 021 3107	SCR S-TPG BIN 2.6X8
Y8	411 002 8503	SCR PAN 3X6
Y9	411 001 4209	SCR S-TPG BIN 4X8
Y10	411 021 5705	SCR S-TPG BIN 3X6
Y11	411 021 4500	SCR S-TPG BIN 3X16
Y12	411 049 0003	SCR PAN + FLG 3X8
Y13	411 039 4103	SCR PAN 2X8
Y14	411 092 3303	WASHER Z 3X12X1

### ELECTRICAL PARTS

Ref. No.	Part No.	Description
71	$\Delta$ 614 214 2561	PCB
72	$\Delta$ 614 214 3476	POWER TRANS
73	$\Delta$ 614 023 3469	POWER CORD
74	614 209 4259	HEAT SINK
75	614 051 9785	LUG
76	614 209 3481	SOCKET, ERASE HEAD
77	614 209 3498	SOCKET, PLAY HEAD
78	614 209 3504	SOCKET, REC/PLAY HEAD
79	614 209 3511	SOCKET, MECHA
80	614 018 9315	SWITCH, STOP
81	$\Delta$ 614 214 2295	PCB, PT PRIMARY
82	$\Delta$ 423 005 3508	FUSE 250V 1.6A (F701,F801)
or	423 017 0106	FUSE 250V 1.6A
83	423 004 1406	FUSE 250V T800MA
or	423 004 1307	FUSE 250V 800MA
or	423 016 9902	FUSE 250V 0.8A (F901)
84	423 003 2404	FUSE 250V T400MA (F902)
or	423 016 9605	FUSE 250V 0.4A
85	$\Delta$ 614 214 2301	PCB
86	$\Delta$ 614 018 2071	SWITCH, VOLTAGE SELECT
87	614 202 1903	TERMINAL BOARD, FM EXT. ANT.
88	614 036 9007	LOOP ANT ASSY
89	614 129 2496	FIXER
or	614 129 4971	FIXER

### DECK P.C.BOARD ASSY

Ref. No.	Part No.	Description
101	614 214 2042	ASSY, PCB, DECK AMP
	614 017 6964	TERMINAL BOARD
	614 211 3592	HEAT SINK
	$\Delta$ 614 130 6919	TUBE 20X1D, FOR R931
	614 211 3233	SOCKET, 5P, + B
	614 020 6579	SOCKET, 5P
	614 020 6562	SOCKET, 4P
	614 020 1246	SOCKET, 5P
	614 211 3240	SOCKET, 5P, SP
	614 035 1712	SOCKET, HEADPHONE
	614 208 2331	SOCKET, FRONT-DECK
	614 209 2408	SWITCH, PUSH, FUNCTION
	614 209 2415	SWITCH, PUSH, TAPE SELECT
L501	614 029 3807	MX COIL
L502	614 027 8545	CHOKE

# PARTS LIST

Ref. No.	Part No.	Description
L502	614 210 3685	INDUCTOR, FERITE
L511	614 210 3722	INDUCTOR, FERITE
L512	614 029 3142	MX COIL
L601	614 029 3807	MX COIL
L602	614 027 8545	CHOKER
or	614 210 3685	INDUCTOR, FERITE
L611	614 210 3722	INDUCTOR, FERITE
L612	614 029 3142	MX COIL
L931	614 212 0804	TRANS, OSC
SVR1	614 204 1871	SEMI V.R, 2K
SVR501	614 204 1901	SEMI V.R, 10K
SVR502	614 204 1901	SEMI V.R, 10K
SVR503	614 204 1901	SEMI V.R, 10K
SVR504	614 204 1956	SEMI V.R, 100K
SVR601	614 204 1901	SEMI V.R, 10K
SVR602	614 204 1901	SEMI V.R, 10K
SVR603	614 204 1901	SEMI V.R, 10K
SVR604	614 204 1956	SEMI V.R, 100K
CN1	614 017 2096	PLUG, 2P
CN2	614 017 2102	PLUG, 3P
CN3	614 017 2126	PLUG, 5P
CN4	614 017 2164	PLUG, 9P
CN5	614 016 4084	PLUG, 2P
IC1	409 020 9107	IC LC4069UB
or	409 051 3907	IC TC4069UBP
or	409 059 3206	IC UPD4069UBC
IC501	409 121 8702	IC LA3246
IC502	409 145 8405	IC UPC1330HA
IC521	409 016 8701	IC LA3220
IC551	409 119 9803	IC CXA1101P
Q1	405 001 7001	TR 2SA1015-GR
or	405 004 4601	TR 2SA608-F-SPA
Q2	405 001 7001	TR 2SA1015-GR
or	405 004 4601	TR 2SA608-F-SPA
Q3	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q4	405 001 7001	TR 2SA1015-GR
or	405 004 4601	TR 2SA608-F-SPA
Q501	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q502	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q503	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q504	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q505	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q506	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q507	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR

Ref. No.	Part No.	Description
Q507	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q508	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q510	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q601	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q602	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q603	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q604	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q605	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q606	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q607	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q608	405 011 8609	TR 2SC1740S-S
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or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q701	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q702	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q801	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q802	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q931	405 018 0200	TR 2SC3331-U

## PARTS LIST

Ref. No.	Part No.	Description
Q932	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q933	405 012 2002	TR 2SC1815-GR
or	405 018 0200	TR 2SC3331-U
or	405 020 7204	TR 2SC945A-K
D1	407 007 9904	DIODE GMA01
D2	407 007 9904	DIODE GMA01
D3	407 007 9904	DIODE GMA01
D4	407 007 9904	DIODE GMA01
D5	407 007 9904	DIODE GMA01
D6	407 005 4505	DIODE DS442X
D7	407 005 4505	DIODE DS442X
D8	407 005 4505	DIODE DS442X
D9	407 005 4505	DIODE DS442X
D10	407 007 9904	DIODE GMA01
D11	407 007 9904	DIODE GMA01
D12	407 007 9904	DIODE GMA01
D13	407 007 9904	DIODE GMA01
D14	407 007 9904	DIODE GMA01
D15	407 007 9904	DIODE GMA01
D16	407 007 9904	DIODE GMA01
D501	407 007 9904	DIODE GMA01
D502	407 007 9904	DIODE GMA01
D601	407 007 9904	DIODE GMA01
D602	407 007 9904	DIODE GMA01
C935	403 081 1209	POLYPRO 0.018U J 100V
R757	△ 401 018 2503	CARBON 330 JB 1/4W
		FLAME PROOF
R857	△ 401 018 2503	CARBON 330 JB 1/4W
		FLAME PROOF
R931	△ 401 023 0709	CARBON 82 JA 1/4W

## MAIN P.C.BOARD ASSY

Ref. No.	Part No.	Description
102	614 214 2059	ASSY, PCB, MAIN
	614 208 4557	TERMINAL
	614 208 4540	FUSE HOLDER
or	614 123 0023	BRAKET FUSE
	614 017 2126	PLUG, 5P, SP, + B
	614 017 2102	PLUG, 3P, AMP IN
	614 020 6555	SOCKET, 3P
	614 020 1246	SOCKET, 5P
IC953	△ 409 101 8302	IC STK4112MK2
Q951	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
D953	△ 407 004 9105	DIODE DSF10C
D954	△ 407 004 9105	DIODE DSF10C
D955	△ 407 004 9105	DIODE DSF10C
D956	△ 407 004 9105	DIODE DSF10C
D957	407 004 9105	DIODE DSF10C
D958	407 004 9105	DIODE DSF10C
D959	407 004 9105	DIODE DSF10C
D960	407 004 9105	DIODE DSF10C
D961	407 007 9904	DIODE GMA01
D962	407 007 9904	DIODE GMA01
C756	403 062 1105	POLYESTER 0.047U M 50V
C856	403 062 1105	POLYESTER 0.047U M 50V
R755	△ 401 008 7204	CARBON 2.2K JB 1/2W FLAME PROOF
R756	△ 401 010 5601	CARBON 5.6 JB 1/2W FLAME PROOF
R855	△ 401 008 7204	CARBON 2.2K JB 1/2W FLAME PROOF

Ref. No.	Part No.	Description
R856	△ 401 010 5601	CARBON 5.6 JB 1/2W FLAME PROOF
R960	△ 402 023 1703	FUSIBLE RES 100 J- 1/4W
R963	△ 402 023 1703	FUSIBLE RES 100 J- 1/4W

### INPUT P.C.BOARD ASSY

Ref. No.	Part No.	Description
103	614 214 2066	ASSY, PCB, INPUT
	614 016 8228	PLUG, 3P, CD
	614 016 8341	PLUG, 2P, TP
	614 035 2702	SOCKET, CD RCA
	614 020 6562	SOCKET, 4P
	614 019 8553	SOCKET, PHONO
	614 020 1253	SOCKET, 6P

## REGULATOR 1 P.C.BOARD ASSY

Ref. No.	Part No.	Description
104	614 214 2073	ASSY, PCB, REGULATOR 1
	614 020 6555	SOCKET, 3P
IC951	△ 409 078 2402	IC L7812ML
or	△ 409 122 6202	IC NJM7812FA
or	△ 409 168 2107	IC UPC7812HF
or	△ 409 001 7603	IC AN7812F

## REGULATOR 2 P.C.BOARD ASSY

Ref. No.	Part No.	Description
105	614 214 2080	ASSY, PCB, REGULATOR 2
	614 020 6555	SOCKET, 3P
IC952	△ 409 078 2402	IC L7812ML
or	△ 409 122 6202	IC NJM7812FA
or	△ 409 168 2107	IC UPC7812HF
or	△ 409 001 7603	IC AN7812F

## PT. SECOND P.C.BOARD ASSY

Ref. No.	Part No.	Description
106	614 214 2097	ASSY, PCB, PT. SECOND
	614 020 1246	SOCKET, 5P
C950	403 057 3800	POLYESTER 0.1U M 50V
C951	403 057 3800	POLYESTER 0.1U M 50V
C952	403 057 3800	POLYESTER 0.1U M 50V
R950	⚠ 402 039 3609	RESISTOR 0.47 J- 1/2W

### GRAPHIC EQUALIZER VOLUME P.C.BOARD ASSY

Ref. No.	Part No.	Description
107	614 214 1816	ASSY, PCB, GEQ. VR
	614 208 2249	PLUG, FRONT-DECK
	614 211 2991	SOCKET, 2P, TO AMP IN
	614 020 1222	SOCKET, 3P
	614 003 4363	V.R, GEQ
	614 003 5766	V.R, BALANCE
	614 024 2393	SWITCH, VR UP/DOWN
L951	614 028 3907	FILTER
L952	614 028 3907	FILTER
S401	614 024 2393	SWITCH, DOWN
S402	614 024 2393	SWITCH, UP
S403	614 024 2393	SWITCH, BAND
S404	614 024 2393	SWITCH, A/M
S405	614 024 2393	SWITCH, CH 1
S406	614 024 2393	SWITCH, CH 2

## PARTS LIST

Ref. No.	Part No.	Description
S407	614 024 2393	SWITCH, CH 3
S408	614 024 2393	SWITCH, CH 4
S409	614 024 2393	SWITCH, CH 5
S410	614 024 2393	SWITCH, CH 6
IC954	409 053 0409	IC TC9153AP
Q703	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q704	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q803	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q804	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q950	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q955	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q956	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
D963	407 007 9904	DIODE GMA01
D964	407 007 9904	DIODE GMA01
D965	408 008 9108	LED SLR-56VC70F130-N
D966	408 008 9108	LED SLR-56VC70F130-N
D967	408 008 9108	LED SLR-56VC70F130-N
D968	408 008 9108	LED SLR-56VC70F130-N
D969	408 008 9108	LED SLR-56VC70F130-N

## POWER SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
108	614 214 1823	ASSY, PCB, POWER SW
	△ 614 017 6964	TERMINAL BOARD
	△ 614 208 4540	FUSE HOLDER
or	△ 614 123 0023	BRACKET FUSE
	△ 614 018 8967	SWITCH, POWER
C999	△ 404 000 2000	CERAMIC 0.01U Z 250V

**TUNER P.C.BOARD ASSY**

Ref. No.	Part No.	Description
109	614 214 0567	ASSY, PCB, TUNER
	614 116 5349	SHIELD PLATE, PARTS SIDE
	614 117 1029	SHIELD PLATE, PATTERN SIDE
	614 030 4787	CERAMIC FILTER (X204)
	614 208 9644	FILTER (X205)
or	614 210 4668	FILTER
	614 207 9348	LCD
CT101	614 007 3683	TRIMMER, 8P
CT151	614 007 6356	TRIMMER, 11P
T201	614 030 3476	I.F.T, FM
T202	614 030 4114	I.F.T, FM
L101	614 034 9870	VHF COIL
L102	614 034 9887	VHF COIL
L103	614 028 4058	FILTER
L104	614 035 0036	VHF COIL
L151	614 033 8904	O.S.C COIL, MW
L152	614 032 7878	ANT COIL, MW
X201	614 030 5128	I.F FILTER

Ref. No.	Part No.	Description
X202	614 030 5128	I.F FILTER
X401	614 008 0063	CRYSTAL 7.2MHZ
or	614 204 0317	CRYSTAL
SVR201	614 204 1918	SEMI V.R, 20K
SVR202	614 204 1901	SEMI V.R, 10K
SVR301	614 204 1864	SEMI V.R, 1K
SVR302	614 204 1901	SEMI V.R, 10K
CN401	614 020 6548	SOCKET
CN403	614 020 6555	SOCKET, 3P
CN407	614 020 6555	SOCKET, 3P
TP103	614 017 6964	TERMINAL BOARD
TP104	614 017 6964	TERMINAL BOARD
TP105	614 017 6964	TERMINAL BOARD
TP106	614 017 6964	TERMINAL BOARD
IC201	409 016 2204	IC LA1265S
IC301	409 016 9500	IC LA3361
IC401	410 064 8407	IC TC9306F-045 BS
IC402	409 154 0209	IC TC9172AP
Q101	405 078 4507	TR 2SK83-R2
Q102	405 012 5904	TR 2SC1923-Y
Q103	405 012 5904	TR 2SC1923-Y
Q104	405 012 5904	TR 2SC1923-Y
Q201	405 018 7902	TR 2SC380TM-O
Q202	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q301	405 012 2002	TR 2SC1815-GR
Q302	405 012 2002	TR 2SC1815-GR
Q303	405 016 2206	TR 2SC2878-A
or	405 016 2305	TR 2SC2878-B
Q304	405 016 2206	TR 2SC2878-A
or	405 016 2305	TR 2SC2878-B
Q351	405 001 7001	TR 2SA1015-GR
Q352	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q354	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q355	405 001 7001	TR 2SA1015-GR
Q356	405 001 7001	TR 2SA1015-GR
Q370	405 001 7001	TR 2SA1015-GR
Q401	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q402	405 078 4903	TR 2SC2634-R
Q403	405 078 4903	TR 2SC2634-R
Q404	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
D101	408 000 0103	VA SVC211SP-B2-AUD
D102	408 000 0103	VA SVC211SP-B2-AUD
D103	408 000 0103	VA SVC211SP-B2-AUD
D104	407 012 5809	DIODE 1S5176
or	407 012 4406	DIODE 1S5133
D151	407 091 5004	VARACTOR DI SVC321SPA-C-2
D152	407 091 5004	VARACTOR DI SVC321SPA-C-2
D201	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D301	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D302	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D351	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D352	407 053 8807	ZENER DIODE MTZ9.1B
D401	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D402	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D403	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D408	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473



PARTS LIST

Ref. No.	Part No.	Description
D409	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D410	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D411	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D413	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D414	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
C152	403 082 2007	POLYPRO 510P J 100V
C306	403 080 5000	POLYPRO 1000P J 100V
C407	403 106 1603	NP-ELECT 1U Q 50V
C410	404 034 8405	CAPACITOR 0.047F Z 5.5V
or	404 037 4107	CAPACITOR 0.047F - 5.5V
R380	△ 401 018 1209	CARBON 33 JB 1/4W FLAME PROOF

LCD LAMP P.C.BOARD ASSY

Ref. No.	Part No.	Description
110	614 207 4787	ASSY, PCB, LCD LAMP
CN402	614 020 6548	SOCKET, 2P
PL401	614 045 9647	LAMP 12V 100MA

IR P.C.BOARD ASSY

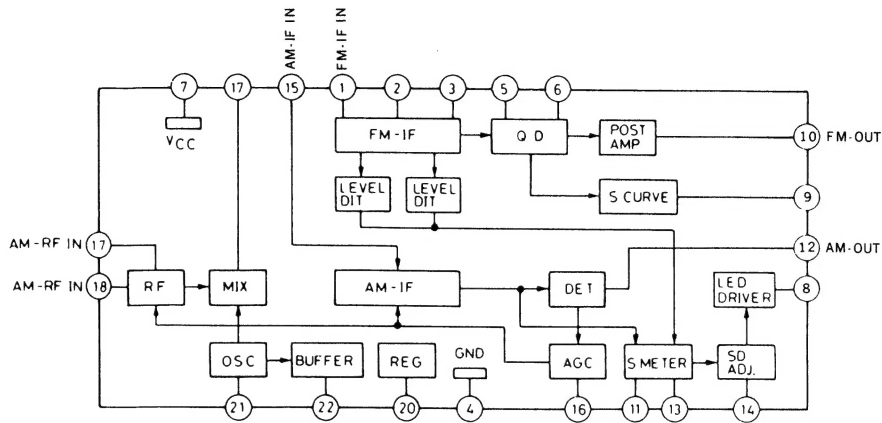
Ref. No.	Part No.	Description
111	614 207 4794	ASSY, PCB, IR
S411	614 203 7928	SPECIAL SWITCH
CN404	614 020 6555	SOCKET, 3P

9K/10K STEP SWITCH P.C.BOARD ASSY

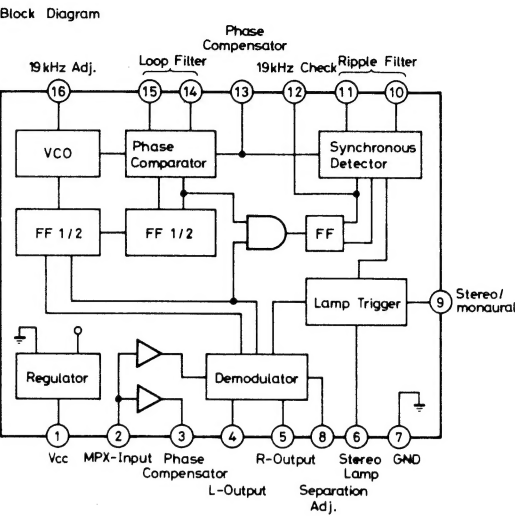
Ref. No.	Part No.	Description
112	614 207 4817	ASSY, PCB, 9K/10K STEP SW
S412	614 011 4591	SLIDE SWITCH
CN408	614 020 6555	SOCKET, 3P

IC BLOCK DIAGRAM (1/3)

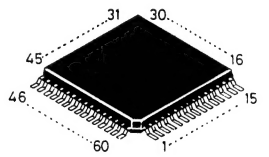
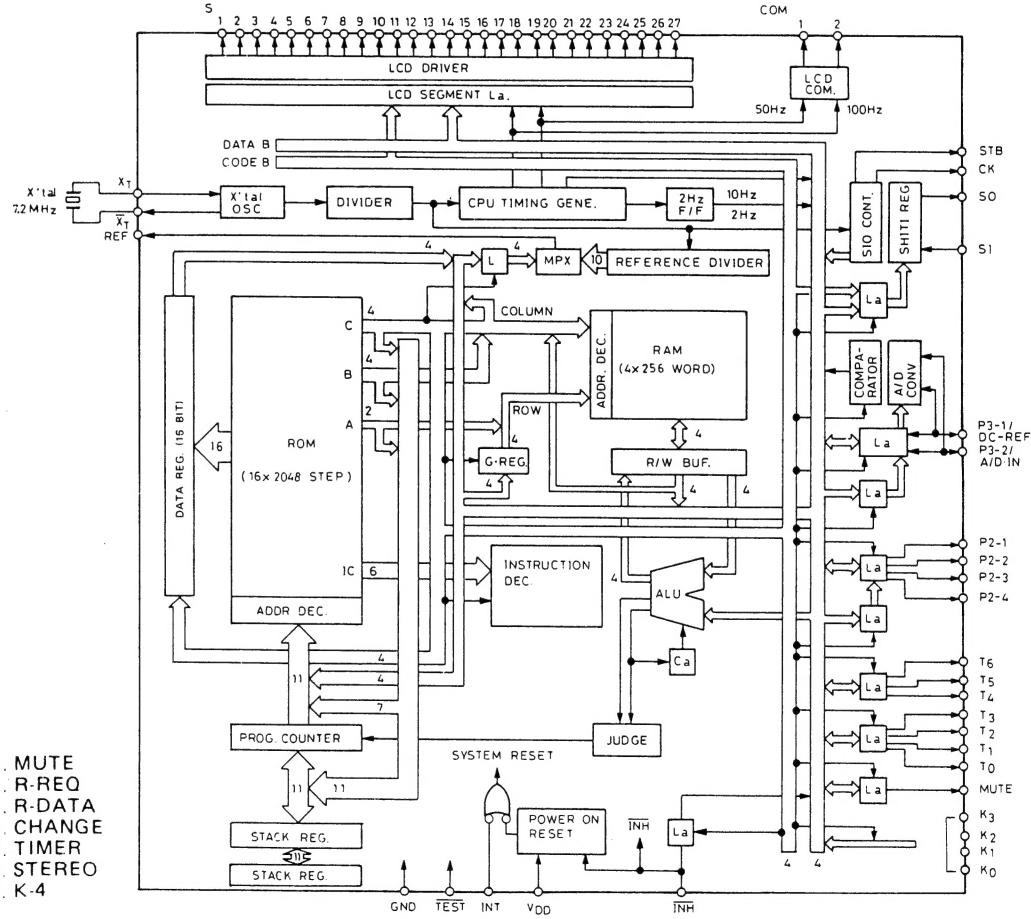
IC201 LA1265 (Tuner System)



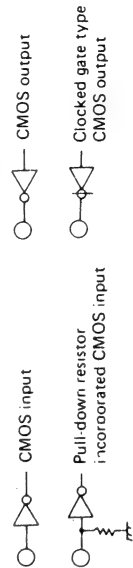
IC301 LA3361 (PLL FM MPX. Stereo Demodulator)



IC401 TC9306F-045-BS

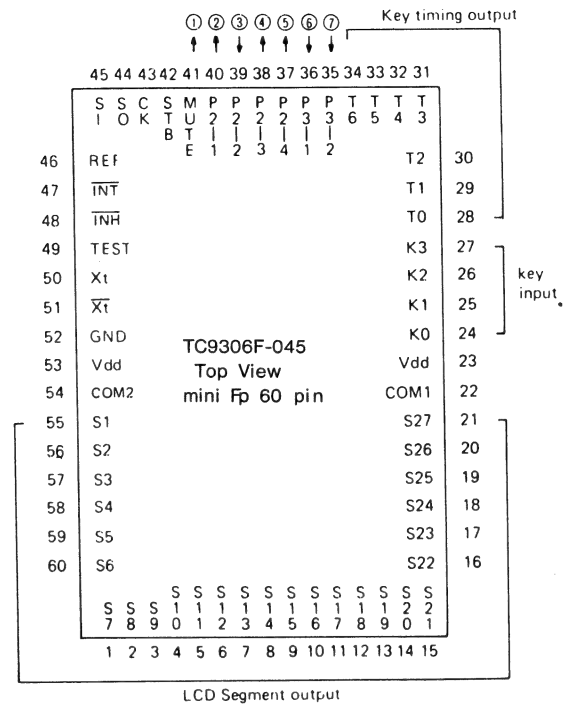


		Output terminal of reference frequency signal supplied to PLL LSI. It is possible to select one of eight kinds of reference frequency signals (1 kHz, 5 kHz, 9 kHz, 10 kHz, 12.5 kHz, 25 kHz, 50 kHz and 100 kHz) by program. Note: When the INH input is at "L" level, the output is automatically set to "L" level.
		System reset signal input terminal of device. While the INT is at "L" level, resetting is activated. When at "H" level, the program is started from 0 address. Normally, when voltage of 0V <sub>4</sub> is applied to V <sub>DD</sub> , system resetting is activated (power-on reset). Therefore, this terminal is used, being set to "H" level. Note: After completion of system resetting, the I/O port is set in input mode. However, since the output state of output port by using the program as needed.
		Select signal input port of radio mode. It is judged that radio is set in ON mode when input is at "H" level, and radio is set in OFF mode when input is at "L" level. When this terminal is set in "L" level, REF output is automatically fixed at "L" level. When the CKSTP command is used in the program, and this CKSTP command is executed while INH is at "L" level, the clock generator and CPU stop the operations, and the memory backup state is set by using low current (1 A or below). In this case, all output terminals (indication output, output port, etc.) are set automatically to "L" level. Note: The CKSTP command is effective when INH is at "L" level. If it is executed when INH is at "H" level, the same operation as that of NOOP command is executed.
		Test mode control input terminal. The test mode is set when input is at "H" level, and normal operation is executed in "L" level or NC state. This terminal incorporates a pull-down resistor. It is normally at "L" level or in NC state. In test mode, the device acts as an evaluation chip, and can evaluate programs on EP ROM base combining with the externally mounted simulation board.
		Connecting terminal of quartz oscillator. 7.2 MHz quartz is connected. When the CKSTP command is executed, oscillation is automatically stopped.
		Ground terminal of device.
		Power-on terminal of device. In normal operation, voltage of 5V ±10% is applied. In backup state (when CKSTP command is executed), a voltage can be reduced to 2V. When voltage of 0V-4.5V is applied to this terminal, system resetting is activated in the device, the program starts from 0 address. (Power-on reset). Note: Power-on resetting is executed when INH is in "L" level. Note: Since the content of each port (output port, internal port, etc.), when power is connected, is undefined, it is necessary to initialize the content by using the program as needed.



(Supplement)

Pin No.	Symbol	Terminal name	Description of function and operation	Remarks
22	COM1	LCD common output	Terminal to output common signal output to LCD. It is possible to indicate max. 54 segments by using the matrix S1-S27. At this terminal, three levels of V <sub>DD</sub> , 1/2 V <sub>DD</sub> and GND are outputted with intervals of 5 ms at a frequency of 50 Hz. Note: During system resetting or when CKSTP command is executed, output is automatically set to "L" level.	V <sub>DD</sub>
54	COM2	LCD segment output	Terminal to output segment signal output to LCD. It is possible to indicate max. 54 segments by using the matrix COM1 and COM2. Data is outputted to these terminals by SEG command (COM1 system) and MARK command (COM2 system). For segment decoding, the decode pattern is made in the ROM area, and it is executed by using the DAL command. Note: During system resetting or when CKSTP command is executed, output is automatically set to "L" level.	
55~60	S1~S6	Key input port	4-bit input port for key matrix input. When KEY command which assigns this port at the operand part is executed, data of these terminals are read in to RAM. All the terminals incorporate pull-down resistor. The output ports of To-T6 are normally used for key return timing signal output.	
24~27	K0~K3	Key timing output port	4-bit (To-T3) or 3-bit (T4-T6) output port. These ports are normally used for key return timing signal output of key matrix.	
35	P3-2	I/O port 3 A/D /analog voltage input	2-bit I/O port. At this port, it is possible to assign input and output per bit. For this assignment, the content of internal port called PORT-3 I/O CONTROL is used.	To A/D converter
36	P3-1	/DC. REF	This terminal is also used for analog input of incorporated 4-bit A/D converter. The switching to A/D converter input is controlled according to the content of PORT-3 I/O CONTROL port. The incorporated A/D converter adopts the programmed successive comparison system in which P3-1 is for reference voltage input, and P3-2 is for analog comparison voltage input.	OUT
37~40	P2-4~P2-1	I/O port 2	4-bit I/O port. At this port, it is possible to assign input and output per bit. For this assignment, the content of internal port called PORT-2 I/O CONTROL is used.	OUT
41	MUTE	Muting signal output port	1-bit output port. This port is normally used for muting control signal output. Note: When the INH input is changed from "H" to "L" or "L" to "H", the output is automatically set to "H" level.	
42	STB	Strobe pulse output	Serial interface. By executing the SIO command, the externally mounted PLL LSI or an optional IC of peripheral part can be controlled. The serial transferring mode, NCD or NCD, can be selected as programmed.	
43	CK	Serial clock output		
44	SO	Serial data output		
45	SI	Serial data input		



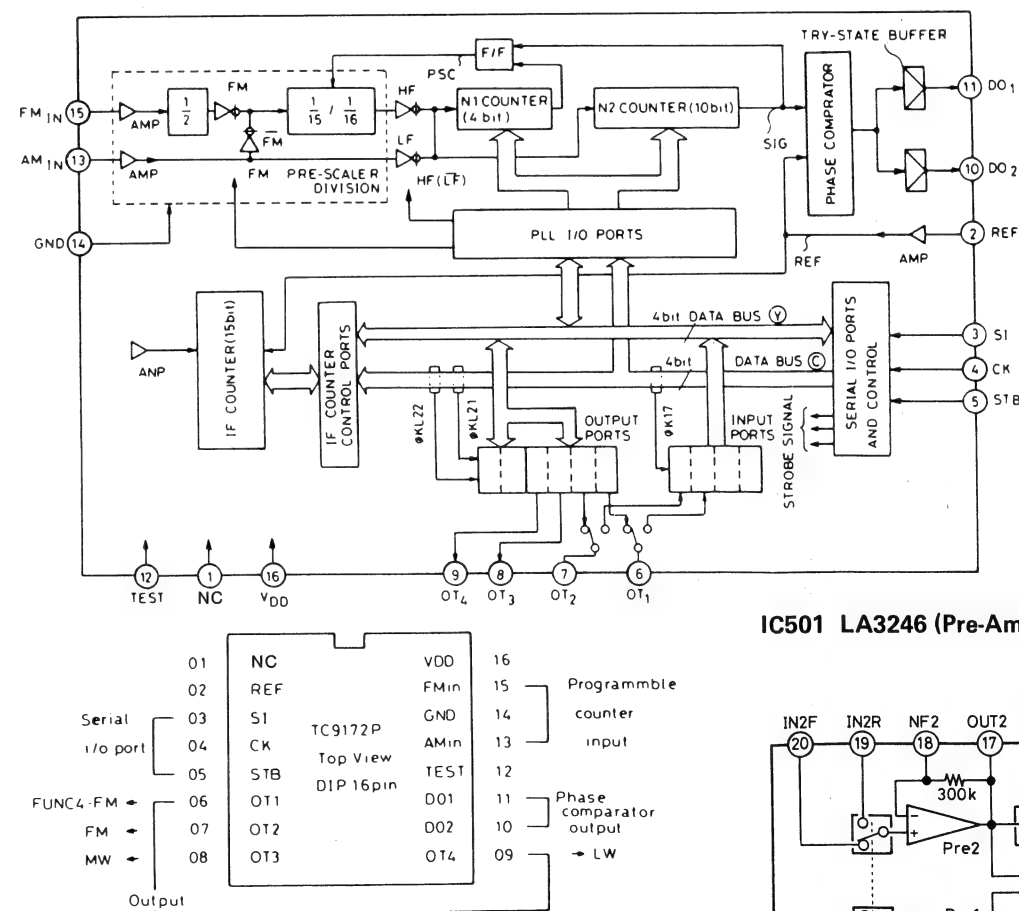
SYSTEM SUMMARY (TC9306F-045)

Combined with PLL LIS TC 9172AP, high efficiency digital tuning system with FM/MW 2-band can be made.

BAND					
BAND	CODE A B	FREQUENCY (Hz)	STEP (Hz)	Fref (Hz)	IF (Hz)
FM	0 0	87.9 ~ 107.9 M	200K	25K	+10.7M
	1 0	87.50 ~ 108.00 M	50K		10.7M
	0 1	76.0 ~ 90.0 M	100K		
	1 1	87.4 ~ 108.1 M	50K		
MW	0 0	530 ~ 1700 K	10K	10K	+450K
	1 0	531 ~ 1602 K	9K	9K	+459K
	0 1	522 ~ 1611 K			+450K
	1 1	522 ~ 1629 K			+450K
LW	1	144 ~ 290 K	AUTO MANU 9K/1K	1K	+459K
SW1	1 -	13.2 ~ 7.3 M	5K	5K	+450K
SW2	- 1	29.5 ~ 21.75 M			

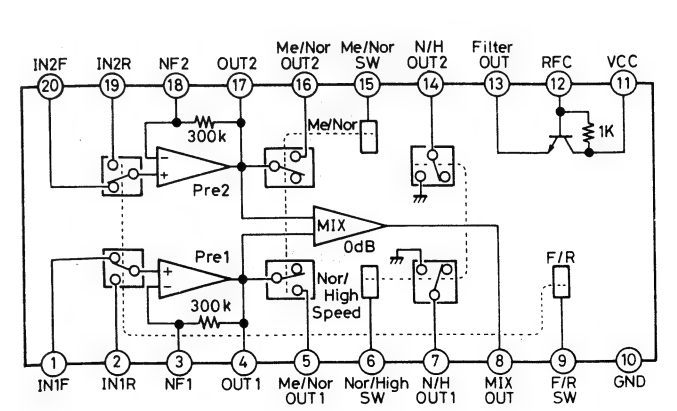
PORT	No.	NAME	FUNCTION	ACTIVE	FIRST SETTING
MUTE	41	MUTE	MUTE OUTPUT	H	H
P2-1	40	REM-DATA	REMOTE INPUT	H	-
P2-2	39	VR UP	VR UP OUTPUT	H	L
P2-3	38	VR DOWN	VR DOWN OUTPUT	H	L
P2-4	37	AUTO/MANUAL	AUTO OUTPUT	H	L
P3-1	36	TUNED/SD	TUNED & SD INPUT	L	-
P3-2	35	STEREO	STEREO INPUT	L	-

IC401 TC9172AP (HIGH-SPEED PLL WITH PRE-SCALER)

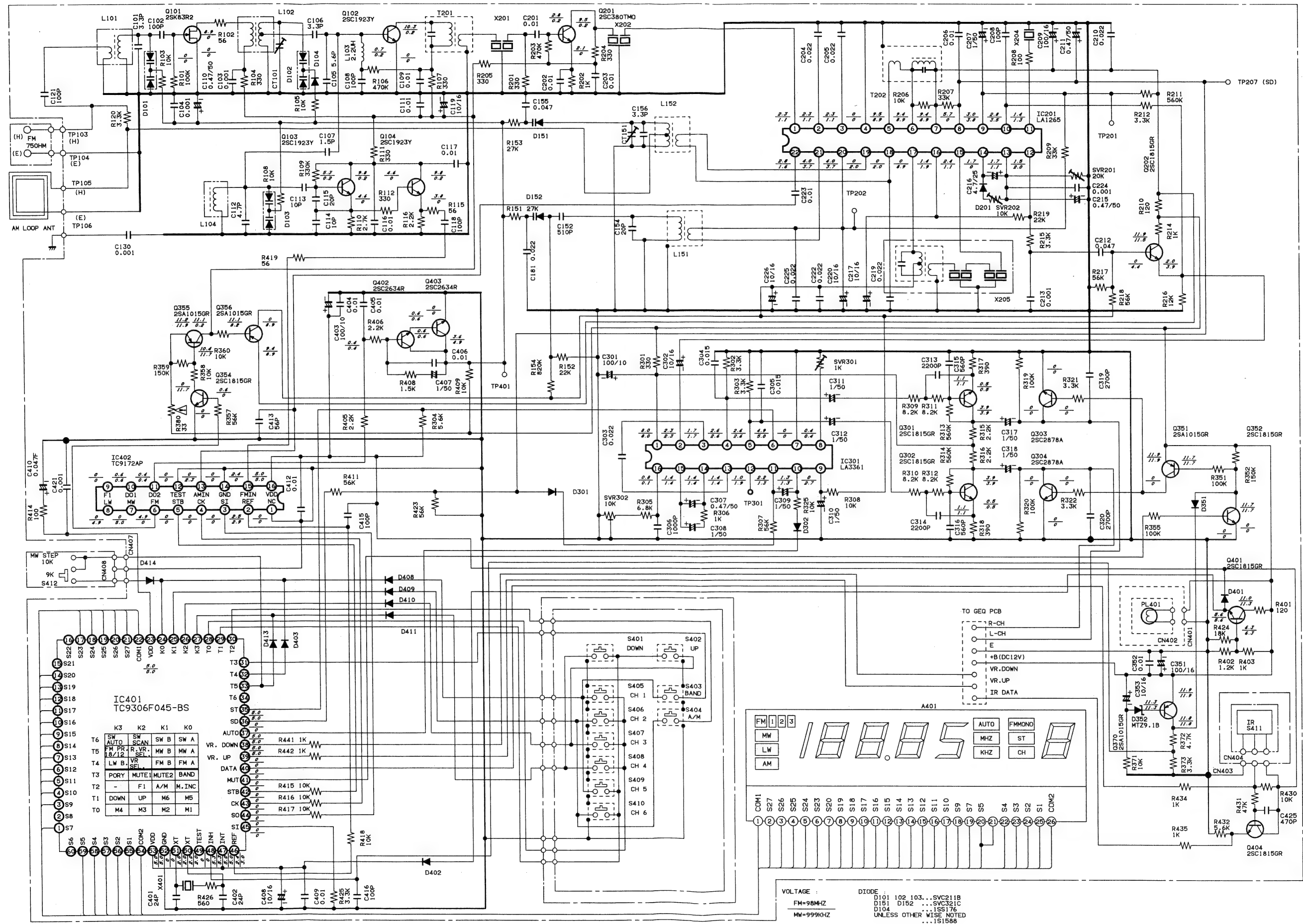


PORT	NO.	NAME	FUNCTION	ACTIVE	FIRST SETTING
OT 1	06	FM	FM BAND OUTPUT	H	H
OT 2	07	AM (MW, LW)	LW, MW OUTPUT	H	L
OT 3	08	MW	MW BAND OUTPUT	H	L
OT 4	09	LW	LW BAND OUTPUT	H	L

IC501 LA3246 (Pre-Amp Mixing-Amp Electrical Switch)

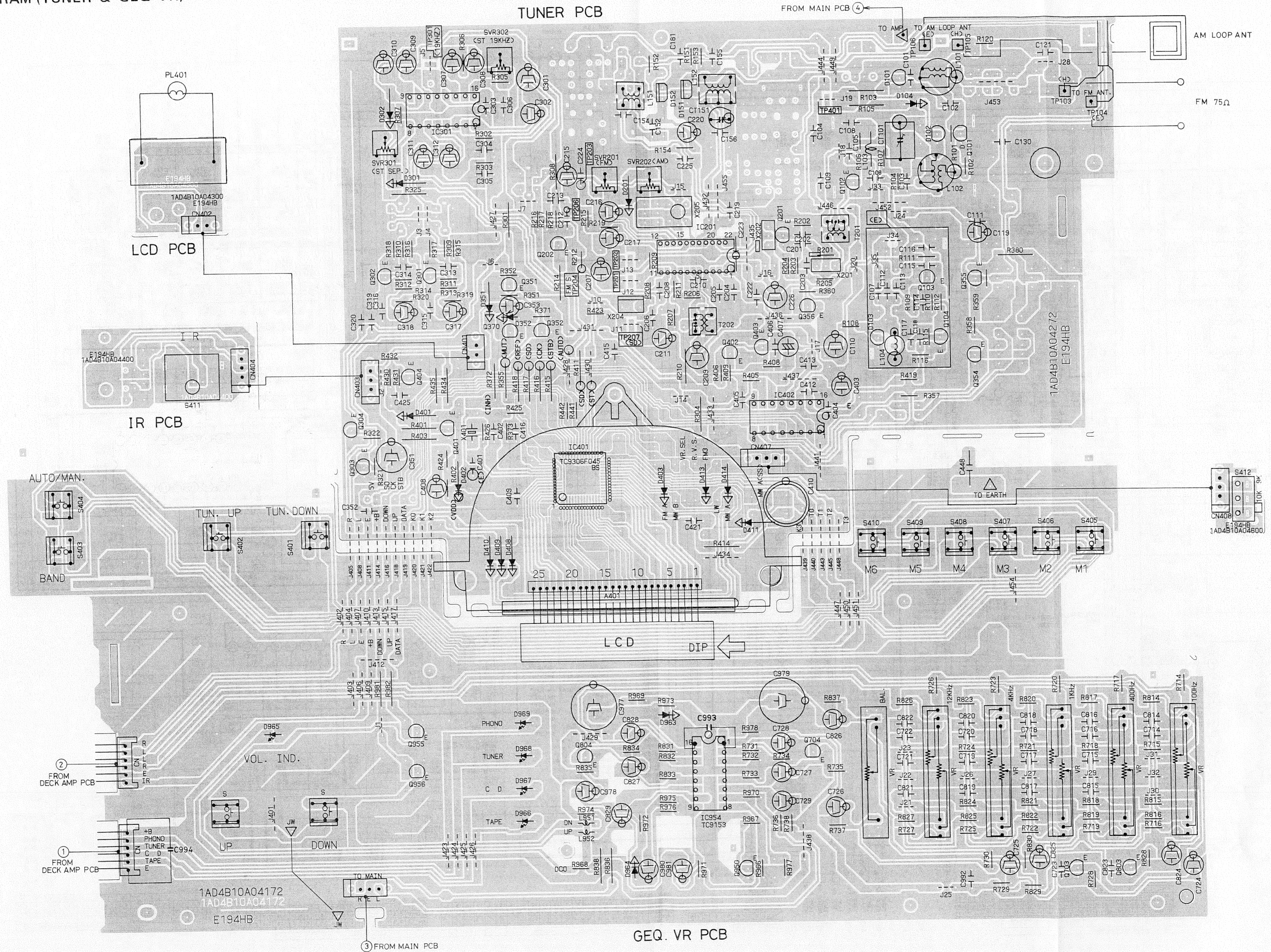


### SCHEMATIC DIAGRAM (TUNER)



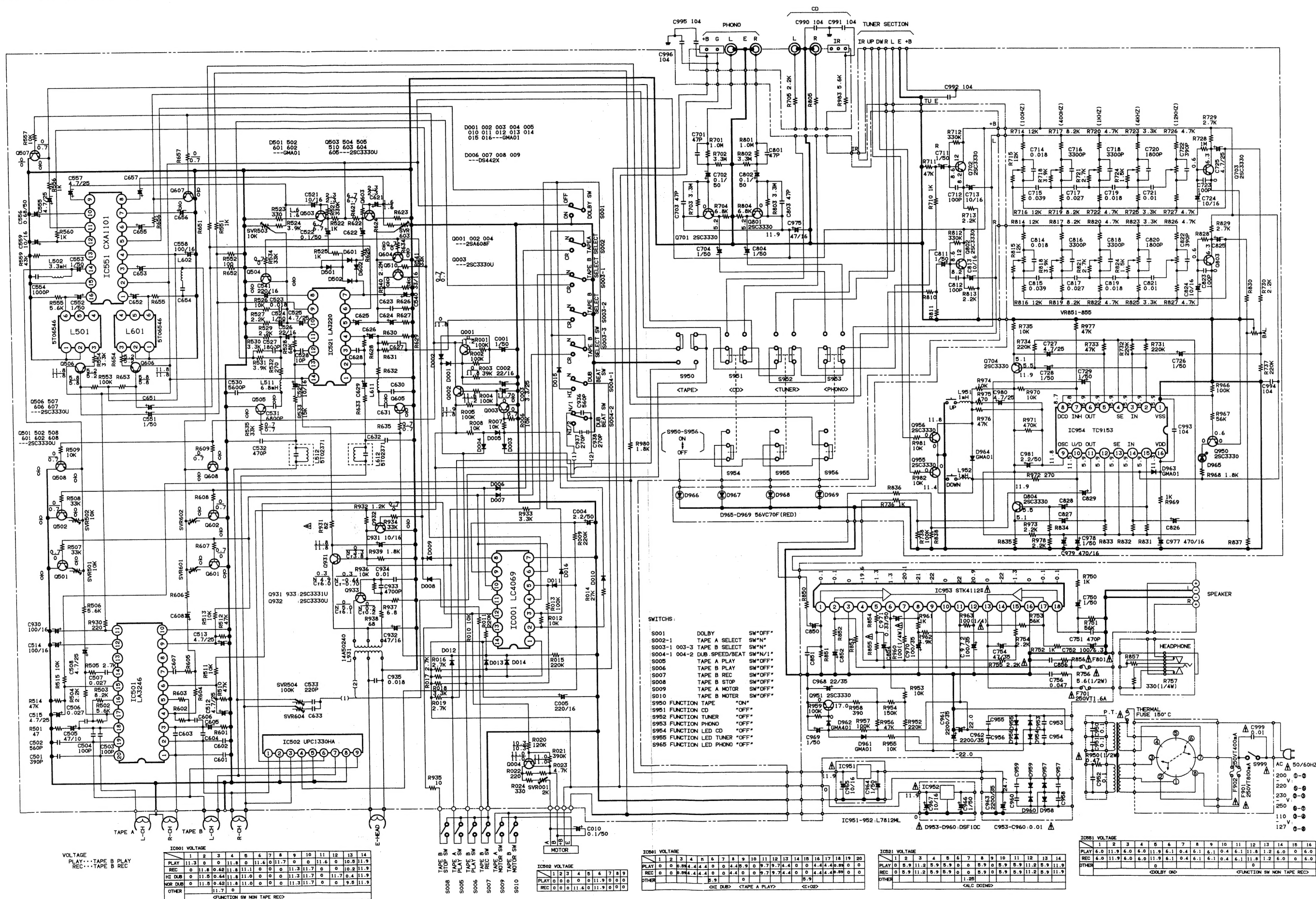


### WIRING DIAGRAM (TUNER & GEO VR)



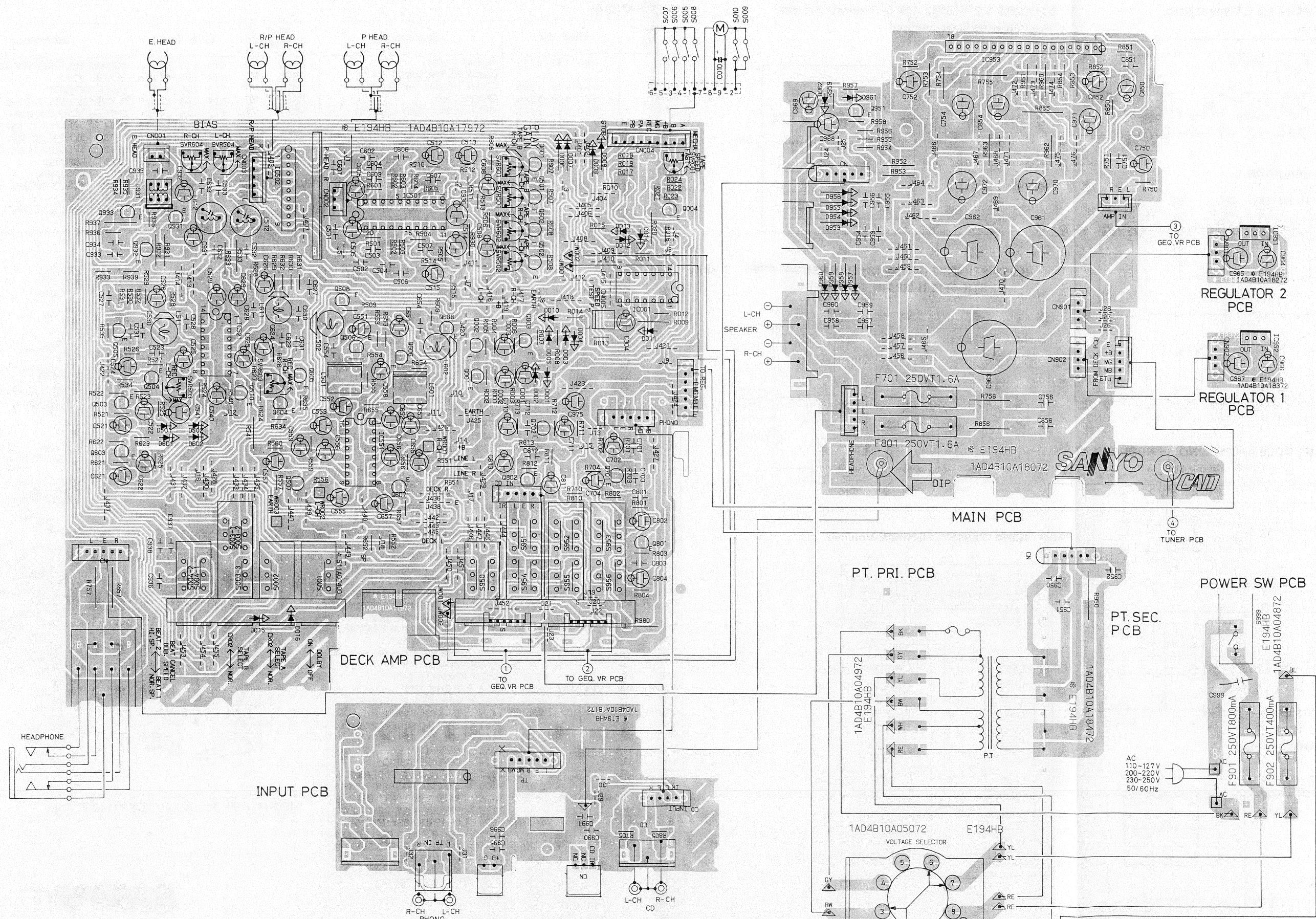


SCHEMATIC DIAGRAM (DECK & AMP)





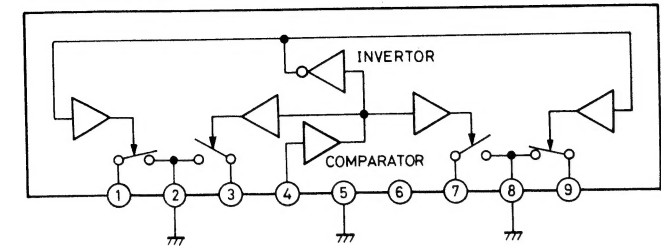
# WIRING DIAGRAM (DECK & AMP)



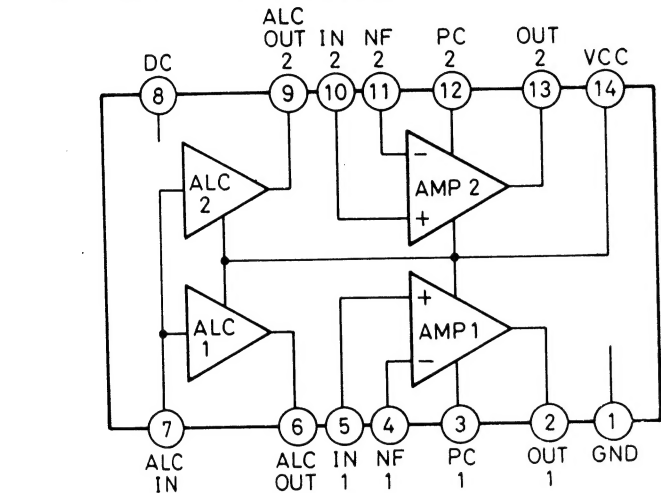


IC BLOCK DIAGRAM (3/3)

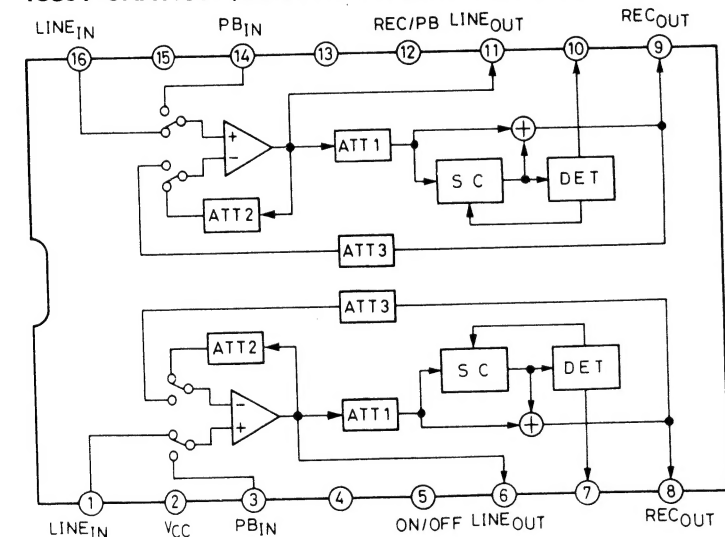
IC502  $\mu$ PC1330HA (Cassette Deck 2 Channel Head Select Switch IC)



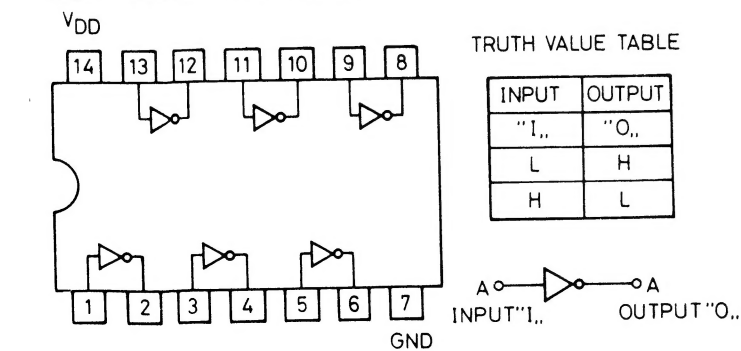
IC521 LA3220 (Dual Pre-Amplifier)



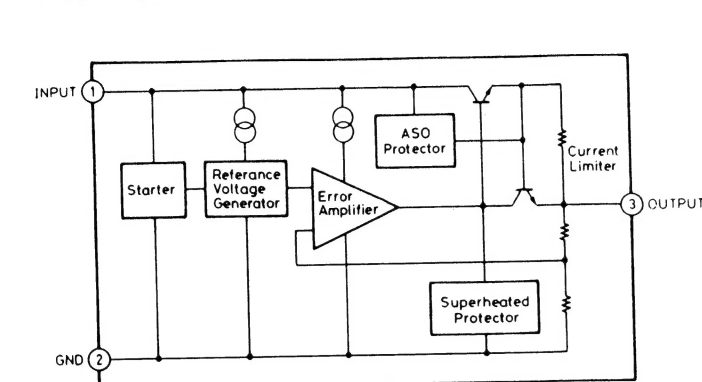
IC551 CXA1101P (DOLBY B-TYPE NOISE REDUCTION)



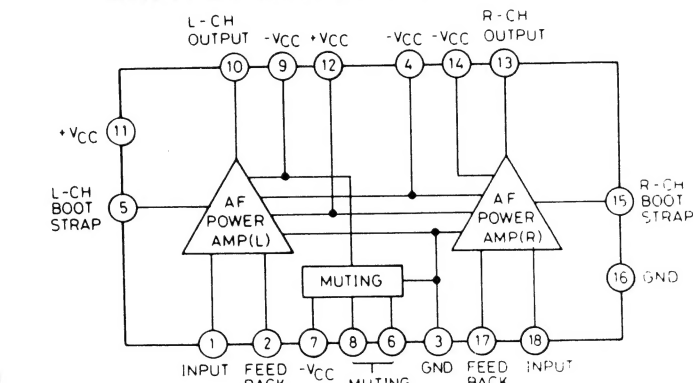
IC001 LC4069 (Hex Inverter)



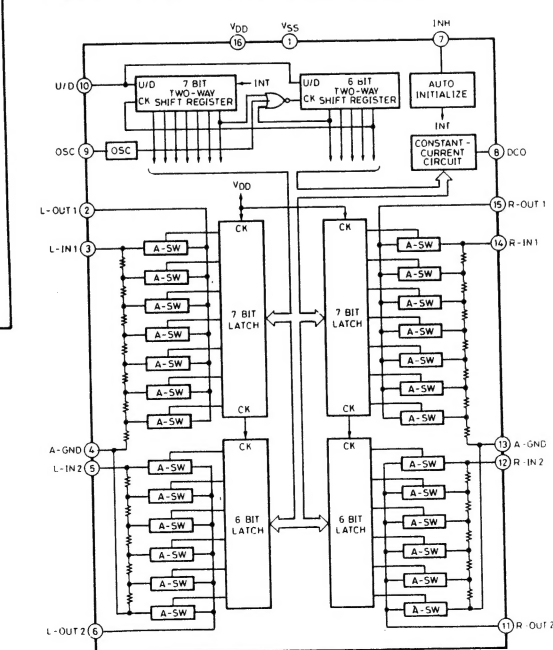
IC951, IC952 LA7812ML (12V 3-Terminal Constant Voltage Regulated Power Supply)



IC953 STK-4122 II (U.K.) (2 CHANNEL AF POWER AMP) STK-4112 II (SPAIN, EUROPE)



IC954 TC9153 (Electronic Volume)

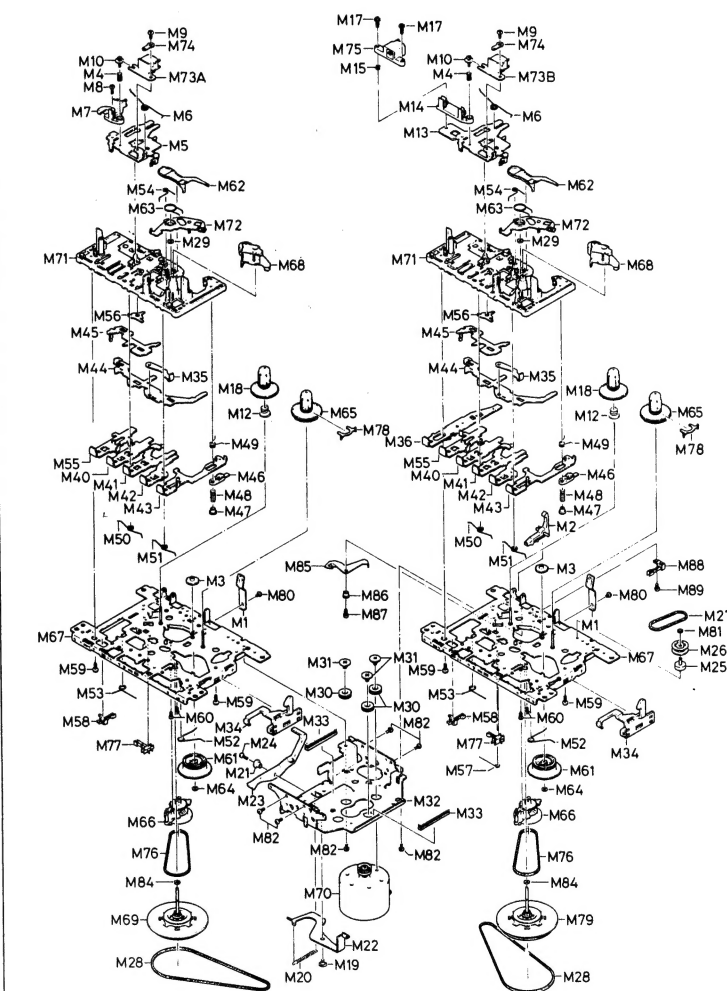


PARTS LIST & EXPLODED VIEW (MECHANISM)

MECHANISM

Ref. No.	Part No.	Description
M1	614 151 8299	SPRING PLATE, CASSETTE PRESURE
M2	614 140 1508	LEVER, RECORD SAFETY
M3	614 134 9046	GEAR, F.FWD
M4	614 151 7162	SPRING COIL, HEAD AZIMUTH
M5	614 211 6944	SLIDE, HEAD PANEL
M6	614 210 3432	SPRING WIRE, HEAD PANEL
M7	614 146 5111	BRACKET, TAPE GUIDE
M8	412 031 7901	SPECIAL SCREW 2X6MM
M9	412 031 6607	SPECIAL SCREW 2X3MM
M10	412 026 1709	SPECIAL SCREW 2X7MM, AZIMUTH
M12	614 208 0351	SPRING, COMP, BACK TENSION
M13	614 210 6822	SLIDE, HEAD PANEL
M14	614 196 0470	BRACKET HEAD, ERASE
M15	614 151 5090	SPRING COIL, ERASE HEAD
M17	412 027 4600	SPECIAL SCREW 2X8MM
M18	614 211 3868	REEL ASSY, SUPPLY
M19	412 005 8101	SPECIAL SCREW, LEVER (22)
M20	614 151 4758	SPRING COIL, PLAY KICK LEVER
M21	614 129 0683	BOSS, PLAY KICK LEVER
M22	614 139 8679	LEVER, PLAY KICK A
M23	614 140 1676	LEVER, PLAY KICK B
M24	412 031 7901	SPECIAL SCREW
M25	614 197 7898	SHAFT, PULLEY
M26	614 197 7720	PULLEY, BELT
M27	614 197 7638	SQUARE BELT, PULLEY
M28	614 133 4127	SQUARE BELT, MAIN
M29	412 026 1808	SPECIAL WASHER, 1.45X3.8X0.5T
M30	614 126 6831	CUSHION, MOTOR RUBBER
M31	412 026 1907	SPECIAL SCREW, MOTOR MTG.
M32	614 122 9553	BRACKET MOTOR
M33	614 126 6848	CUSHION, ANTI VIBRATION
M34	614 140 1522	LEVER, EJECT SLIDE
M35	614 140 1539	LEVER, EJECT KICK
M36	614 196 0500	LEVER, REC. BUTTON
M40	614 196 0517	LEVER, REW. BUTTON
M41	614 196 0524	LEVER, F.FWD BUTTON
M42	614 196 0531	LEVER, STOP BUTTON
M43	614 208 0313	LEVER, PAUS BUTTON
M44	614 201 1737	SLIDE, PUSH BUTTON ACTUATOR
M45	614 201 1744	SLIDE, SWITCH ACTUATOR
M46	614 208 0320	LEVER, PAUSE
M47	614 129 0669	BOSS, PAUSE STOPPER
M48	614 151 7186	SPRING COIL, PAUSE LEVER
M49	614 152 1244	SPRING WIRE, PAUSE CONTROL
M50	614 152 1251	SPRING WIRE, BUTTON LEVER
M51	614 152 1268	SPRING WIRE, BUTTON LEVER
M52	614 152 1275	SPRING WIRE, EJECT ACTUATOR
M53	614 152 1282	SPRING WIRE, P.S LEVER
M54	614 152 1299	SPRING WIRE, MECHANISM CONTROL
M55	614 196 0555	LEVER, PLAY BUTTON
M56	614 129 0676	BOSS, R/P STOPPER
M57	614 152 1305	SPRING WIRE, REC. BUTTON
M58	614 024 3437	SWITCH, POWER
M59	412 026 2201	SPECIAL SCREW 2X5MM
M60	412 026 2300	SPECIAL SCREW 2X4.5MM
M61	614 134 9053	GEAR, CAM
M62	614 140 1614	LEVER, SENSING
M63	614 151 8312	SPRING PLATE, GEAR PLATE
M64	412 013 5000	SPECIAL WASHER, 1.2X3.8X0.3T
M65	614 211 3875	REEL ASSY, TAKE UP
M66	614 069 2273	PULLEY ASSY, REW/F.FWD CLUTCH
M67	614 067 2770	CHASSIS ASSY, MECHANISM
M68	614 210 3302	LEVER PINCH ROLLER ASSY
M69	614 068 1871	FLYWHEEL DISK ASSY, TAPE A
M70	614 211 3752	COMMUTATE MOTOR ASSY
M71	614 067 3258	SUB CHASSIS ASSY, BASE
M72	614 070 0916	LEVER ASSY, GEAR PLATE
M73A	614 208 4069	HEAD, PLAY
M73B	614 208 4052	HEAD, R/P
M74	614 208 0276	LUG, GND
M75	614 021 8831	MAGNETIC HEAD, ERASE

Ref. No.	Part No.	Description
M76	614 195 5087	SQUARE BELT, REW/F.FWD
M77	614 195 4424	SWITCH, PLAY
M78	614 195 5094	LEVER, SENSOR
M79	614 204 8672	FLYWHEEL ASSY, TAPE B
M80	412 026 1402	SPECIAL SCREW 2X3MM
M81	412 013 4904	SPECIAL WASHER 1.2X3X0.25T
M82	412 026 2003	SPECIAL SCREW 2X4MM
M84	412 013 8902	SPECIAL WASHER 2X3.5X0.3T
M85	614 197 0219	LEVER, SW (M88)
M86	614 197 0202	BOSS, LEVER (M85)
M87	412 026 2102	SPECIAL SCREW 2X3MM
M88	614 196 9756	SWITCH, REC.
M89	614 124 4594	SPECIAL SCREW 2X5MM



MECHANISM TM-DCX49TN/SP (149-474-16)

**SANYO**

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Osaka, Japan